

Title (en)  
BATTERY COOLING STRUCTURE OF HYBRID INDUSTRIAL VEHICLE

Title (de)  
BATTERIEKÜHLSTRUKTUR FÜR EIN INDUSTRIELLES HYBRIDFAHRZEUG

Title (fr)  
STRUCTURE DE REFROIDISSEMENT DE BATTERIE POUR VÉHICULE DE FABRICATION HYBRIDE

Publication  
**EP 2314537 A1 20110427 (EN)**

Application  
**EP 09808228 A 20090813**

Priority  
• JP 2009064305 W 20090813  
• JP 2008210303 A 20080819

Abstract (en)  
An object of the present invention is to provide a battery cooling structure of a hybrid industrial vehicle such as a hybrid forklift, the battery cooling structure being capable of sufficiently cooling a battery and also of eliminating the possibility that the battery receives heat from its peripheral devices. To achieve the object, a second cooling air flow passage (35) for battery is provided separately from a first cooling air flow passage (31) in which a radiator (32) is disposed. A battery pack 26 or a battery is disposed in the second cooling air flow passage (35). The second cooling air flow passage (35) is connected to the first cooling air flow passage (31) at a position upstream of a cooling fan (33) disposed in the first cooling air flow passage (31), so that the cooling fan (33) sucks cooling air in the first cooling air flow passage (31) and also sucks cooling air in the second cooling air flow passage (35).

IPC 8 full level  
**B66F 9/075** (2006.01); **B60K 1/04** (2006.01); **B60K 11/06** (2006.01); **B60K 11/08** (2006.01); **B60L 8/00** (2006.01); **B60L 11/18** (2006.01); **B60L 50/15** (2019.01)

CPC (source: EP US)  
**B60K 1/04** (2013.01 - EP US); **B60K 11/06** (2013.01 - EP US); **B60K 11/08** (2013.01 - EP US); **B60L 8/003** (2013.01 - EP US); **B60L 50/61** (2019.01 - EP US); **B60L 50/66** (2019.01 - EP US); **B66F 9/07531** (2013.01 - EP US); **B66F 9/07595** (2013.01 - EP US); **B60K 1/02** (2013.01 - EP US); **B60K 11/04** (2013.01 - EP US); **B60K 2001/005** (2013.01 - EP US); **B60L 2200/42** (2013.01 - EP US); **B60Y 2200/15** (2013.01 - EP US); **Y02P 90/60** (2015.11 - EP US); **Y02T 10/62** (2013.01 - EP US); **Y02T 10/70** (2013.01 - EP US); **Y02T 10/7072** (2013.01 - EP US)

Cited by  
CN110862054A; EP2918437A4; CN109980320A; FR3062090A1; US9631342B2; WO2022008189A1

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

Designated extension state (EPC)  
AL BA RS

DOCDB simple family (publication)  
**EP 2314537 A1 20110427**; **EP 2314537 A4 20120118**; **EP 2314537 B1 20130116**; JP 4831845 B2 20111207; JP WO2010021292 A1 20120126; US 2011147104 A1 20110623; US 8960346 B2 20150224; WO 2010021292 A1 20100225

DOCDB simple family (application)  
**EP 09808228 A 20090813**; JP 2009064305 W 20090813; JP 2010525679 A 20090813; US 200913056992 A 20090813